

## INTENT

### Science Curriculum Year A: Planning, Progress and Long-Term Knowledge Growth

YEAR 1/2	Substantive geographical content	Recurring substantive themes, ideas and language (Key Concepts)	Subject rationale: Supporting pupils' wider geography curriculum journey	Basic disciplinary training in geography
<b>Autumn Term</b>  Animals including humans	Identify, name, describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals, including pets)	Taught alongside the History unit of changes in living memory, this unit explores animals including humans. Children will be confident in their knowledge of a variety of common animals.	Building on prior learning in EYFS, children further embed their knowledge of similarities and differences in living things, life cycles, healthy living and carnivores and herbivores.	Working scientifically: Plan, fair testing, using equipment, predicting, recording, measuring, observing, comparing, explanations, evaluations
	identify and name a variety of common animals that are carnivores, herbivores and omnivores	They will know that animals vary in many ways, having different structures and also have different skin coverings and eat certain things.	This will support their later learning on Vocabulary learnt will support later learning in LKS2 on animals, including humans and living things in their habitats and UKS2 on evolution and inheritance, livings and their habitats and animals including humans. The unit links to our Eco schools topics of <b>biodiversity, school grounds and healthy living.</b>	
	identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense	Children will be confident in their knowledge of parts of the human body and their five senses.		
	notice that animals, including humans, have offspring which grow into adults	This unit will deepen their knowledge of the key concepts of <b>scientific method, life processes and evolution and adaption.</b>		
	find out about and describe the basic needs of animals, including humans, for survival (water, food and air)	Pupils will be secure in key vocabulary including e.g. <b>head, body, eyes, ears, mouth, teeth, leg, tail, wing, claw, fin, scales, feathers, fur, beak, paws, hooves.</b>		
	describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene.	<b>Offspring, reproduction, growth, child, young/old stages e.g chick/hen, baby/child/adult, caterpillar/butterfly, exercise, heartbeat, breathing, hygiene, germs, disease, food types e.g meat, fish, bread, vegetables, rice</b>		
	Identify and classify animals Ask simple questions and recognising they can be answered in different ways.			
<b>Spring Term</b>  Famous Scientists	Mary Anning	<b>History link</b>		

<b>Summer Term</b>  Everyday Materials	Distinguish between an object and the material from which it is made and its everyday use.	Taught alongside the English fiction unit (Michael Recycle by Ellie Bethel) on recycling, the Geography unit of physical and human features, the History Unit on Castles and the DT unit on building structures exploring how they can be made stronger using different materials. This unit will deepen their knowledge of the key concepts of <b>scientific method, states of matter and our world.</b>  Pupils will be secure in key vocabulary including e.g <b>object, material, wood, plastic, glass, metal, water, rock, brick, paper, fabric, elastic, foil, card/cardboard, rubber, wool, clay, hard, soft, stretchy, stiff, bendy, floppy, waterproof, absorbent, breaks/tears, rough, smooth, shiny, dull, see-through, opaque, transparent, translucent, reflective, non-reflective, flexible, rigid, shape, push/pushing, pull/pulling, twist/twisting, squash/squashing, bend/bending, stretch/stretching</b>	Build on prior learning in EYFS, children will further embed their knowledge on floating and sinking, changes of state (melting & freezing) and forces (push and pull and magnet). This will support their later learning in LKS2 on rocks and soils, forces and magnets and states of matter and UKS2 on properties and changes of materials, earth and space and forces.  The unit links to our Eco schools topics of <b>litter and waste, global citizenship, and school grounds.</b>	Working scientifically: Plan, fair testing, using equipment, predicting, recording, measuring, observing, comparing, explanations, evaluations
	Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock			
	Describe the simple physical properties of a variety of everyday materials			
	Identify, compare and group the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses based on their simple physical properties.			
	Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.			
	Compare the uses of everyday materials in and around the school with materials found in other places.			
	Observe closely, identifying and classifying the uses of different materials and recording their observations.			
	Performing simple tests to explore questions			